

# A SEMICONDUCTOR-PROCESSING DEVICE PROVIDED WITH A REMOTE PLASMA SOURCE FOR SELF-CLEANING

## Abstract of the Disclosure

5           A plasma CVD device includes a reaction chamber, a remote plasma discharge  
chamber that is provided remotely from the reaction chamber, and piping that links the  
reaction chamber and the remote plasma discharge chamber. The remote plasma  
discharge chamber activates cleaning gas by plasma discharge energy, and the activated  
cleaning gas is introduced into the inside of the reaction chamber through the piping and  
10       changes solid substances that adhere to the inside of the reaction chamber in  
consequence of film formation, to gaseous substances, thereby cleaning the inside of the  
reaction chamber. The device is characterized by at least one of the following: (a) the  
remote plasma discharge chamber generates active species using radio frequency  
oscillating output energy of a preselected frequency; (b) the piping is made of materials  
15       that are not corroded by the active species; or (c) the piping is provided with a through-  
flow type valve.

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